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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/527,017	03/07/2005	Dietmar Schratt	SCHRATT	2263
20151	7590	05/03/2006	EXAMINER	
HENRY M FEIEREISEN, LLC 350 FIFTH AVENUE SUITE 4714 NEW YORK, NY 10118			BRAHAN, THOMAS J	
			ART UNIT	PAPER NUMBER
			3654	

DATE MAILED: 05/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/527,017

Applicant(s)

SCHRATT ET AL.

Examiner

Thomas J. Brahan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 February 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 February 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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1. The drawings corrections filed with the amendment on February 8, 2006 have not been approved as they introduce new matter. For example, the structure of the telescopic arm (13), the location and structure of the spreader (8) and the holding pins, the location of the vertical axis (a_2), the location of the horizontal axis (a_1), and the location of sensors (S and S_1). The corresponding amendments which were made to the specification must be deleted.

2. The drawings remain objected to under 37 C.F.R. § 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the following structures must be shown, or the features must be canceled from the claims. No new matter may be entered.

- The structure of the shiftable telescopic arm and its spreader of claim 11.
- The single level intermediate storage facility of claim 13.
- The identical grippers of claim 16.
- The structure for the pivoting the cargo about a vertical axis of claim 19.
- The structure for the pivoting the cargo about a horizontal axis of claim 20.
- The rail systems and center of gravity relationships of claims 25 and 26.
- The positioning transmitters of claims 28 and 29.

3. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

4. The following is a quotation of the first paragraph of 35 U.S.C. § 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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5. Claims 11-32 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The structural details of following features are not fully understood. No new matter may be entered.

- The telescopic arm as well as its spreader (claim 11).
- The structure for pivoting the cargo about a vertical axis (claim 19).
- The structure for pivoting the cargo about a horizontal axis (claim 20).
- The structures of the second hoist as to have it move the cargo with a center of gravity above a single rail (claim 25) or several rails (claim 26) are unclear. No such center of gravity relationship is evident from the drawing.

6. The following is a quotation of the second paragraph of 35 U.S.C. § 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which applicant regards as his invention.

7. Claims 11-32 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- In the last line of claim 11, the limitation “the rail-guided second long-distance transportation means” lacks antecedent basis within the claim.
- It is unclear as to how claim 16 further limit the claimed invention, a method for loading and unloading long distance transportation means, as this claim is devoid of method steps.
- In claim 21, it is unclear as to how the cargo can be considered as moved by the first long-distance transportation means over the rails of the second long-distance transportation means. It appears as though the term “from” should not have been changed to “by” in the amendment.
- It is unclear as to how applicant is considering the cargo moved with its center of gravity above a single rail, as recited in claim 25, or above several rails, as recited in claim 26.

8. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. § 103, the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised

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of the obligation under 37 C.F.R. § 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of potential 35 U.S.C. § 102(f) or (g) prior art under 35 U.S.C. § 103.

9. Claims 11-14, 16-18, 21-26 and 28-32 (as best understood) are rejected under 35 U.S.C. § 103(a) as being unpatentable over Tax et al in view of Brickner et al. Tax et al shows a container transporting system which loads and unloads containers between ships and rail vehicles. When the ship is unloaded the path of movement of the containers comprising the steps of:

- lifting the cargo by a first rail-guided hoist (a crane 5) with gripper (at 8) from the first long-distance transportation means (ship 4);

- transferring the cargo to a transfer zone (above the load deck of one of the automatic vehicles 81-83);

- lowering and depositing the cargo in the transfer zone (onto the deck of the automatic vehicle);

- lifting and automatically transferring the cargo from the transfer zone (off of an automatic vehicle) by a shiftable and/or telescopic arm (shifting hoist 17) of a second rail-guided hoist (one of the cranes 16) to a predetermined location in an intermediate storage facility (under the crane 16) for storage;

- lowering and depositing the cargo in the intermediate storage facility;

- automatically moving the second hoist (crane 16) to a predetermined location of the intermediate storage facility;

- lifting and automatically withdrawing the cargo by the shiftable and/or telescopic arm (shifting hoist 17) of the second hoist (crane 16) from the predetermined location in the intermediate storage facility and automatically transferring the cargo to a predetermined location in the transfer zone (at an automatic vehicle)

- lowering and depositing the cargo in the transfer zone (on an automatic vehicle); and

- lifting the cargo by the first hoist (at times, as half the time the same crane 5 will be used for both unloading the ship and the later loading of the rail cars) from the predetermined location in the transfer zone (the deck on the automatic vehicle) for placement onto a corresponding predetermined location on the rail-guided second long-distance transportation means (on rail tracks 9).

Tax et al varies from the claims by not specifying that the cargo is identified before it is lifted off of the ship (4). However all of these automatic container yards identify each container as to automatically deliver it to a specific destination in the storage yard. Brickner et al shows a similar load handling system with a container identification system, see column 9, lines 30-38. It would have been obvious to one of ordinary skill in the art at the time the invention was made by applicant to modify the transfer and storage facility of Tax et al by providing it with container identification readers, for automated computer controlled handling of container at the facility, as taught by Brickner et al. The identifying step is automatic, as recited in claim 12. If only a few containers were at a given storage area, the storage area would be a single-level storage area, as recited in claim 13. It would have been obvious to stack the containers as more containers arrive at a given storage area, as recited in claim 14. Having

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identical grippers for the first and second hoists, as recited in claim 16, would have been obvious to one of ordinary skill in the art, as both hoists are lifting identical loads. The second hoist (16) moves the containers horizontally and vertically and along the storage facility, as recited in claims 17, 18, 22 and 23. Moving the containers from the ship to the transfer zone moves the container over the rails (10), as recited in claim 21. Moving the cargo back onto the transfer zone moves it to a desired position (orientation), as recited in claim 24. The second hoist (16) moves the containers above (at a higher elevation) several ground rails (9, 10, 18), as recited in claims 25 and 26. Re claims 28-31, it would further have been obvious to one of ordinary skill in the art at the time the invention was made by applicant to control the movements of the first and second hoists automatically with position sensors, as also taught by Brickner et al, see column 18, line 42 through column 19, line 33. The cargo moved by Tax et al comprises standardized containers, as recited in claim 32.

10. Claims 11-14, 16-18 and 21-32 (as best understood) are rejected under 35 U.S.C. § 103(a) as being unpatentable over Montgomery et al in view of Tax et al and Brickner et al. Montgomery et al shows a container transporting system which loads and unloads containers between ships and rail vehicles. When the ship is unloaded the path of movement of the containers comprises the steps of:

- lifting the cargo by a first rail-guided hoist (C) with gripper (18) from the first long-distance transportation means (ship D);

- transferring the cargo to a transfer zone (16);

- lowering and depositing the cargo in the transfer zone (16);

- lifting and automatically transferring the cargo from the transfer zone (16) by a shiftable and/or telescopic arm (shifting bridge 41) of a second rail-guided hoist (crane B) to a predetermined location in an intermediate storage facility (under the crane 16) for storage;

- lowering and depositing the cargo in the intermediate storage facility (35);

Montgomery et al varies from the claims by not specifying that the cargo is identified before it is lifted off of the ship, and by not using the first crane (C) for loading rail cars which are retrieved from the storage facility (35). Brickner et al shows a similar load handling system with a container identification system, see column 9, lines 30-38. Tax et al shows a similar system which includes rails (10) under the first cranes (5), as to have the first cranes loading and unloading rail cars as well as ships. It would have been obvious to one of ordinary skill in the art at the time the invention was made by applicant to modify the transfer and storage facility of Montgomery et al by providing it with container identification readers, for automated computer controlled handling of container at the facility, as taught by Brickner et al. It would further have been obvious to one of ordinary skill in the art at the time the invention was made by applicant to modify the transfer and storage facility of Montgomery et al by locating rail tracks under the first cranes, as to have the first cranes loading and unloading rail cars as well as the ships, to increase efficiency, as taught by Tax et al. The identifying step of Brickner et al is automatic, as recited in claim 12. At times the storage area (35) would be a single-level storage area, as recited in claim 13, or would have stacked containers, see figure 1, as recited in claim 14. The two grippers (12 and 18) of the first and second hoists appear to

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be identical, as recited in claim 16, if not this would have been obvious to one of ordinary skill in the art, as both hoists are lifting identical loads. The second hoist (B) moves the containers horizontally and vertically and along the storage facility, as recited in claims 17, 18, 22 and 23. Moving the containers from the ship to the transfer zone moves the containers over rails (of the crane C), as recited in claim 21. Moving the cargo back onto the transfer zone move it to a desired position, as recited in claim 24. The second hoist (B) moves the containers above (at a higher elevation) several ground rails, as recited in claims 25 and 26. Montgomery et al has sensors controls, see column 9, line 61 through column 10, line 23, for automatic controls which inhibit collisions, as recited in claims 27-31, and the cargo moved comprises standardized containers, as recited in claim 32.

11. Claim 15 (as best understood) is rejected under 35 U.S.C. § 103(a) as being unpatentable over Tax et al in view of Brickner et al, as applied above to claim 11, and further in view of Lassig or Carder. Tax et al, as modified, shows the basic claimed facility for moving containers to and from long distance transportation means, but varies from the claims by not having a rack system at the intermediate storage facilities (29). Lassig shows a similar load handling system with a storage facility with a rack (10). Carder et al shows a similar load handling system with a storage facility with a rack (40). It would have been obvious to one of ordinary skill in the art at the time the invention was made by applicant to modify the storage areas (29) of Tax et al by providing them with racks, to increase their storage capacity, as taught by Lassig or as taught by Carder et al.

12. Claims 19 and 20 (as best understood) are rejected under 35 U.S.C. § 103(a) as being unpatentable over Tax et al in view of Brickner et al, as applied above to claim 11, and further in view of Cooper. Tax et al, as modified, shows the basic claimed facility for moving containers to and from long distance transportation means, but varies from the claims by not having means for pivoting the cargo about horizontal or vertical axes. Cooper shows a gantry crane spreader with list, trim and skew controls. It would have been obvious to one of ordinary skill in the art at the time the invention was made by applicant to modify at least one of the cranes of Tax et al by providing the spreader with list, trim and skew controls, for aligning the spreader with the cargo, as taught by Cooper.

13. Claims 19 and 20 (as best understood) are rejected under 35 U.S.C. § 103(a) as being unpatentable over Montgomery et al in view of Tax et al and Brickner et al, as applied above to claim 11, and further in view of Cooper. Montgomery et al, as modified, shows the basic claimed facility for moving containers to and from long distance transportation means, but varies from the claims by not having means for pivoting the cargo about horizontal or vertical axes. Cooper shows a gantry crane spreader with list, trim and skew controls. It would have been obvious to one of ordinary skill in the art at the time the invention was made by applicant to modify at least one of the cranes of Montgomery et al by providing the spreader with list, trim and skew controls, for aligning the spreader with the cargo, as taught by Cooper.

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14. Hubbard and Dunstan are cited as showing related multiple crane container terminals.

15. Applicant's remarks in the amendment filed February 8, 2006, have been fully considered, but are deemed moot in view of the above new rejections. The amendment necessitated the new grounds, accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

16. An inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas J. Brahan whose telephone number is (571) 272-6921. The examiner's supervisor, Ms. Katherine Matecki, can be reached at (571) 272-6951. The new fax number for all patent applications is (571) 273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Questions regarding access to the Private PAIR system, should be directed to the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Thomas J. Brahan
Primary Examiner
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